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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/884,048 | 06/20/2001 | Francois Cunchon | T2147-907310 | 2706 |

181 7590 12/14/2006

MILES & STOCKBRIDGE PC
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MCLEAN, VA 22102-3833

EXAMINER

NGUYEN, THAN VINH

ART UNIT PAPER NUMBER

2187

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/884,048

Applicant(s)

CUNCHON ET AL.

Examiner

Than Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/25/06 has been entered.
2. Claims 9-20 are pending.

Response to Amendment/Argument

3. Applicant has amended the claims to include limitations not previously considered. The amended claims are addressed below. Applicant argues that Alexander does not teach nor suggest detecting/acknowledging an error indicated during the operating system mounting function (the OS mounting function constructs an execution environment for the OS). The Examiner disagrees. The Examiner interprets the above limitation as detecting whether an error (hardware/firmware failures due to bad data or hardware) occurs during the mounting of the OS mounting function. Alexander teaches the OS mounting function as the BIOS initialization code which creates/prepares an environment for which the OS can operate (1/32-36). Without a proper BIOS initialization, the OS cannot operate properly because the system environment is faulty. Alexander also teaches detecting when there is an error during the BIOS initialization (2/15-22). Thus, the Examiner maintains that Alexander does teach the claimed limitation of detecting/acknowledging an error indicated during the operating system mounting function.

Claim Rejections - 35 USC § 112

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4. Claims 18-20 recites the limitation "the system of claim 9". There is insufficient antecedent basis for this limitation in the claim. Claim 9 is a computing machine, not a system.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 9-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Alexander (US 6,393,559).

As to claim 9:

Alexander teaches a self-healing BIO initialization code. Alexander teaches the claimed computing machine comprising a RAM (memory modules 18; 1/15) and a mass memory (hard disk 26; 1/33) in which an operating system is stored, characterized in that the mass memory comprises a partition that is read-only accessible to the operating system (1/20-25), said partition containing a startup function (startup/boot up; 1/9-15), wherein for every startup of the computing machine, a BIOS initiates the startup function which resides at an address of the partition, the startup function which activates the operating system calls the automatic repair function (BIOS initialization code is run; 1/15-39), the automatic repair function calls an operating system mounting function which constructs an execution environment for the operating system based on data structures saved in the mass memory (BIOS initialization code

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creates environment for OS to function; 1/32-36) and, if an error based on incoherent data structures saved in the mass memory is detected during the operating system mounting function (hardware/firmware error/failure encountered during BIOS/OS initialization; 1/41-60), the automatic repair function automatically calls the startup function upon return of a standard acknowledgement function (if error is encountered during boot initialization, BIOS initialization reboots – load BIOS again; 2/23-30;3/23-35;4/16-23).

As to claim 10:

Alexander teaches the startup function comprises a first code sequence for loading the contents of the partition into RAM (load BIOS; 1/20-25) and a second code sequence for activating in RAM said automatic repair function (POST; 1/26-39)

As to claim 11:

Alexander teaches a third code sequence that calls said mounting function, executable in RAM with write capability in at least one other partition of the mass memory (POST; 1/15-20,33-35).

As to claim 12,13:

Alexander teaches a fourth code sequence for acknowledging an error indicated by said mounting function and a fifth code sequence for restarting the machine after the acknowledgment of the error (after error detected, reboot; 1/44-56).

As to claim 14:

Alexander teaches the mass memory is a hard disk (hard disk; 1/32).

As to claim 15:

Alexander teaches a switch for resetting the RAM and restarting the machine (reset/reboot/startup switch, 1/9).

As to claim 16:

Alexander teaches a method for automatically starting a computing machine comprising a RAM and a mass memory, characterized in that it comprises:

starting the machine by means of a signal (startup/reset/reboot signal; 1/9);
loads into the RAM contents of a partition of the mass memory (load BIOS; 1/12-15);
mounting an operating system from the RAM that includes the repair function based on a call from the automatic repair function which is called by a startup function residing in the partition, the startup function being operable to activate the operating system, wherein mounting the operating system comprises constructing an execution environment for the operating system based on data structures saved in the mass memory (BIOS initialization code creates environment for OS to function; 1/32-36);
acknowledging any error indicated in the mounting of the operating system; and
reactivating, in response to the acknowledging, the loading of the contents of the partition of the mass memory (if error is encounter during boot initialization, BIOS initialization reboots – load BIOS again; 2/23-30;3/23-35;4/16-23).

As to claim 17:

Alexander teaches a step that creates partitions in the mass memory (1/30-33); storing at least part of the operating system and functions for executing a startup, the automatic repair function is capable of calling a mounting function and an acknowledgment function in the first partition, which is to be read-only accessible to said operating system (storing BIOS; 1/20-30).

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As to claim 18:

Alexander teaches the automatic repair function acknowledges error(s) detected during the mounting of the operating system (1/40-46).

As to claim 19:

Alexander teaches calling a standard acknowledgement function to repair the error (1/40-63).

As to claim 20:

Alexander teaches an instruction sequence to call the OS mounting function (call POST; 1/15,34); an instruction sequence that can call a standard acknowledgement function (acknowledge error; 1/44); and an instruction sequence that is capable of calling the startup function upon return of the acknowledgement (reboot; 1/44).

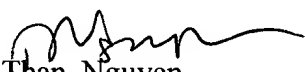
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Than Nguyen whose telephone number is 571-272-4198. The examiner can normally be reached on 8am-3pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Than Nguyen
Primary Examiner
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